Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A parameter correction circuit, which is a built-in parameter correction circuit of a semiconductor integrated circuit, comprising:

a current supply circuit;

a variable parameter component;

a plurality of switching circuits;

a voltage measuring circuit; and

an adjusting circuit that adjusts a parameter value of the variable parameter component, wherein

the current supply circuit, the variable parameter component, the plurality of switching circuits, the voltage measuring circuit and the adjusting circuit are included in the semiconductor integrated circuit,

any one of the switching circuits is connected to a reference parameter component having a preliminarily known parameter value,

the switching circuits are allowed to switch electrical connections among the current supply circuit, the reference parameter component, the variable parameter component and the voltage measuring circuit,

the voltage measuring circuit measures voltages generated in the reference parameter component and the variable parameter component respectively when current is respectively

supplied to the reference parameter component and the variable parameter component from the current supply circuit, and

the adjusting circuit adjusts the parameter value of the variable parameter component such that the voltage of the variable parameter component reaches the ~~voltages~~ voltage of the reference parameter component.

2. (Previously Presented) A parameter correction circuit according to claim 1, wherein the variable parameter component and the reference parameter component are a variable resistor element and a reference resistor element, respectively.

3. (Previously Presented) A parameter correction circuit according to claim 1, wherein the variable parameter component and the reference parameter component are a variable inductor element and a reference inductor element, respectively.

4. (Previously Presented) A parameter correction circuit according to claim 1, wherein the variable parameter component and the reference parameter component are a variable capacitor element and a reference capacitor element, respectively.

5. (Previously Presented) A parameter correction circuit according to claim 1, wherein the reference parameter component is placed outside the semiconductor integrated circuit, and connected to an external terminal of the semiconductor integrated circuit.

6. (Previously Presented) A parameter correction circuit according to claim 5, wherein the reference parameter component is shared by a parameter component having a preliminarily known parameter value, which is originally connected to the external terminal of the semiconductor integrated circuit.

7. (Previously Presented) A parameter correction circuit according to claim 1, wherein the reference parameter component is included in the semiconductor integrated circuit.

8. (Previously Presented) A parameter correction circuit according to claim 1, wherein the semiconductor integrated circuit having the built-in parameter correction circuit is a PLL circuit, the PLL circuit having a phase comparator, a charge pump, a filter circuit, a voltage control oscillator and a frequency divider, the filter circuit being constituted by a resistor element and a capacitor element, the variable parameter component being included in the semiconductor integrated circuit as the resistor element or the capacitor element.

9. (Original) A parameter correction circuit according to claim 1, wherein the current supply circuit comprises a current supply, and a mirror circuit having an output terminal, the mirror circuit being connected to the current supply and allows a current corresponding to the current of the current supply to flow from the output terminal.

10. (Previously Presented) A parameter correction circuit according to claim 9, wherein the switching circuits comprise first and second switching circuits, the first switching circuit is placed between the mirror circuit and the reference parameter component, and the

second switching circuit is placed between the mirror circuit and the variable parameter component.

11. (Currently Amended) A parameter correction circuit according to claim 10, wherein the switching circuits further comprise a third switching circuit having the same structure as the first and second switching circuits ~~circuit~~ have, and

the third switching circuit is connected to the output terminal of the mirror circuit so that the voltage measuring circuit measures a voltage of the third switching circuit when a current is allowed to flow from the mirror circuit to the third switching circuit to obtain a parameter value of the first and second switching circuits for the parameter value adjustment of the variable parameter component.

12. (Previously Presented) A parameter correction circuit according to claim 1, wherein the current supply circuit comprises a current supply and a mirror circuit having first and second terminals, the mirror circuit being connected to the current supply and allows a current having the same value as the current of the current supply to flow from the first terminal to the reference parameter component, and also to flow from the second terminal to the variable parameter component.

13. (Previously Presented) A parameter correction circuit according to claim 12, wherein the switching circuits comprise first and second switching circuits, the first switching circuit is placed between the reference parameter component and the voltage measuring circuit,

and the second switching circuit is placed between the variable parameter component and the voltage measuring circuit.

14. (Previously Presented) A parameter correction circuit according to claim 1, wherein the current supply circuit comprises a load circuit, the load circuit has a transistor that has a source connected to a current supply or grounded, and supplies a current through a drain thereof, and a switching circuit that is connected to the gate of the transistor so as to on-off control the transistor.

15. (Previously Presented) A parameter correction circuit according to claim 1, wherein the voltage measuring circuit comprises a sample hold circuit that holds the voltage of the reference parameter component, and a comparator that compares the voltage of the variable parameter component with the voltage of the reference parameter component that has been held in the sample hold circuit.

16. (Previously Presented) A parameter correction circuit according to claim 2, wherein the parameter correction circuit is used as a current-voltage converter which, after the resistance value of the variable resistor element has been corrected to a target value, outputs a voltage that is generated in the variable resistor element, upon allowing a current to flow from a current supply or another current supply to the variable resistor element.

17. (Previously Presented) A parameter correction circuit according to claim 1, wherein the semiconductor integrated circuit comprises another variable parameter component

having the same structure as the variable parameter component, and the another variable parameter component is adjusted to the same parameter-value as the variable parameter component that is included in the parameter correction circuit.

18. (Original) A parameter correction circuit according to claim 3, wherein the parameter correction circuit is used as an oscillator circuit in which, after the inductance value of the variable inductor element has been corrected to a target value, an oscillating frequency thereof is set to a target frequency.

19. (Currently Amended) A parameter correction circuit according to claim 1, wherein the variable parameter component comprises a plurality of unit parameter components that are series-connected to one another, and among all the unit parameter components, a desired number ~~of series circuits~~ of the ~~continuous~~ unit parameter components are extracted.

20. (Currently Amended) A parameter correction circuit according to claim 1, wherein the variable parameter component comprises a plurality of unit parameter components that are parallel-connected to one another, and among all the unit parameter components, a desired number ~~of parallel circuits~~ of the ~~continuous~~ unit parameter components are extracted.

21. (Currently Amended) A parameter correction method for correcting a parameter value of a variable parameter component, the method comprising the steps of:

connecting a current supply circuit to a reference parameter component having a preliminarily known parameter value;

allowing a current to flow from the current supply circuit through the reference parameter component to measure a voltage of the reference parameter component at this time;

calculating a value of the current supplied from the current supply circuit based upon the voltage of the reference parameter component and the preliminarily known parameter value of the reference parameter component;

calculating a target voltage of the variable parameter component when the parameter value of the variable parameter component is set to a target value based upon the value of the current calculated; and

while allowing a current to flow from the current supply circuit to the variable parameter component and measuring a voltage of the variable parameter component at this time, correcting the parameter value of the variable parameter component so that the voltage of the variable parameter component is set to the target voltage.